

BEST AVAILABLE COPY



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,285	10/31/2003	David K. Cinader	59061 US002	1616
32692	7590	02/10/2006		
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			EXAMINER STOKES, CANDICE CAPRI	
			ART UNIT 3732	PAPER NUMBER
DATE MAILED: 02/10/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/698,285

Applicant(s)

CINADER ET AL.

Examiner

Candice C. Stokes

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-18, 22-25, 27, 32 and 33 is/are rejected.
- 7) ☒ Claim(s) 13, 19-21, 26, 28, 30 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/12/04 & 2/14/04.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2,4-11,14-17,22-25, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Huff et al (USPN 6,394,798). Huff et al disclose an orthodontic appliance 20 comprising: a base 24; a body (as shown in Figure 21) extending outwardly from the base 24; an archwire slot 32 extending across the appliance 20 in a generally mesial-distal direction; a post 44; and a latch 160 for releasably retaining an archwire in the archwire slot 32, wherein the latch 160 includes a clip 162 having a region 166 next to the archwire slot for receiving an archwire, wherein the clip 162 also includes a recess (as best seen in Figure 21 where the clip extends around post 44 where post 44 abuts from the body of appliance 20) that receives the post 44, and wherein the recess is not in communication with the archwire-receiving region. As to claim 2, the clip 162 includes a leg section (as best shown at sides of clip extending on opposite sides of the recess) extending next to the recess, and wherein the leg section is movable in a direction away from the recess in order to admit the post into the recess. Regarding claims 4 and 24, the clip 162 has a first section (where reference 162 is shown), a second section (where ref# 166 is shown) and a third section (where ref # 164 is shown) interconnecting the first section and the second section. and wherein the first section, the second section and the third section together present a generally U'-shaped configuration (generally create an upside down u-shape as shown

Art Unit: 3732

in Figure 21) and at least partially define the archwire-receiving region. As to claims 5,7 and 23, the clip has a fourth section (opposite the third section) connected to the third section (where 164 is shown) and a leg section (third section and fourth section are leg sections) connected to the fourth section, wherein the leg section and the third section extend in generally parallel directions. With regards to claims 6,8 and 23, the leg section, the third section and the fourth section at least partially surround the recess (as shown in Figure 21). As to claim 9, the first section and the second section extend in directions generally parallel to the direction of extension of the leg sections (see Figure 21). Regarding claim 10, the recess has an opening that is oriented to receive the post when the clip is moved in a direction generally along an occlusal-lingual reference axis relative to the post. As to claim 11, the recess has an opening that is oriented to receive the post when the clip is moved in a direction along a generally buccolabial-lingual reference axis relative to the post. Regarding claim 14, the post 44 is connected to the body. Furthermore to claim 15, the post 44 extends in a direction generally along a mesial-distal reference axis. To claim 16, the body has a mesial and a distal side, and wherein the post 44 extends in a direction generally perpendicular to at least one side. Regarding claim 17, the post 44 includes an enlarged head that extends past the recess. As to claim 22, Figure 21 shows the post 44 has at least one flat side, and wherein the clip includes at least one flat region in contact with the at least one flat side of a post 44. With regards to claim 25, at least two leg sections extend outwardly from the first section in directions generally along an occlusal-lingual reference axis. To claim 27, the at least two leg sections extend away from the third section in directions generally along a buccolabial-lingual reference axis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1) Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huff et al in view of Hanson (USPN 4,248,588). Huff et al disclose the claimed invention except for the leg section of the clip being made of a resilient material. Hanson teaches an orthodontic bracket having a clip or "a retainer member 48 of thin flat resilient material, usually stainless steel: (column 3, lines 53-54). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the clip of a resilient material as taught by Hanson, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

2) Claims 12, 18, and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huff et al. Huff et al disclose the claimed invention except for the clip including a second recess, the latch including a second clip, and the recess and the regions having openings oriented at 90 and 180 degrees relative to each other. As to claims 12 and 18, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the clip having more than one recess as well as make the latch having more than one clip, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Art Unit: 3732

As to claims 32-33, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the recess and the region each have openings that are oriented at angles of approximately 90 degrees or 180 degrees or at any angle relative to each other, since it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

3) Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huff et al in view of Fukutomi (US 2003/0064342). Huff et al disclose the claimed invention except for the archwire slot having a liner that includes at least one portion extending beyond the body of the appliance. Fukutomi teaches an orthodontic bracket having a liner 110 having portions extending beyond the body of the bracket. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the appliance disclosed by Huff et al with an archwire liner extending beyond the body as taught by Fukutomi in order to provide room for improving the external appearance of the bracket or appliance.

Allowable Subject Matter

Claims 13,19-21,26,28, and 30-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Candice C. Stokes whose telephone number is (571) 272-4714. The examiner can normally be reached on 8:00am - 4:30pm.


Art Unit: 3732

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Candice C. Stokes


Cary E. O'Connor
Primary Examiner

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☒ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.